

IN THE CLAIMS

Please amend the claims as follows:

1-24. (Canceled)

25. (New) A system, comprising:

an implantable monitoring circuit comprising:

a first sensing input configured to receive information indicative of a ventricular electrical signal corresponding to a ventricular event;

a second sensing input configured to receive information indicative of an atrial electrical signal corresponding to an atrial event; and

a memory circuit configured to store an adjustable blanking setting;

an implantable therapy circuit configured to provide electrical energy to be therapeutically delivered to a heart as directed by the implantable monitoring circuit; and

wherein the implantable monitoring circuit is configured to ignore, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration corresponding to the adjustable blanking setting, at least one of (1) the atrial electrical signal when the information indicative of the ventricular electrical signal received by the first sensing input includes an intrinsic ventricular event, or (2) the ventricular electrical signal when the information indicative of the atrial electrical signal received by the second sensing input includes an intrinsic atrial event.

26. (New) The system of claim 25, wherein the adjustable blanking setting is an adjustable blanking interval; and

wherein the implantable monitoring circuit is configured to ignore, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration specified by the adjustable blanking interval, the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

27. (New) The system of claim 26, wherein the implantable monitoring circuit is configured to discard the information indicative of the atrial electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

28. (New) The system of claim 26, wherein the implantable monitoring circuit is configured to disable the second sensing input, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

29. (New) The system of claim 25, wherein the adjustable blanking setting is an adjustable blanking interval; and

wherein the implantable monitoring circuit is configured to ignore, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration specified by the adjustable blanking interval, the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

30. (New) The system of claim 29, wherein the implantable monitoring circuit is configured to discard the information indicative of the ventricular electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

31. (New) The system of claim 29, wherein the implantable monitoring circuit is configured to disable the first sensing input, for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

32. (New) The system of claim 25, wherein the adjustable blanking setting includes a first adjustable blanking interval and a second adjustable blanking interval; and

wherein the implantable monitoring circuit is configured to ignore, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration

specified by the first adjustable blanking interval, the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event; and

wherein the implantable monitoring circuit is configured to ignore, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration specified by the second adjustable blanking interval, the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

33. (New) The system of claim 25, further comprising:

an external interface device comprising a user input configured to receive the adjustable blanking setting from a user;

wherein the external interface device is configured to transmit the adjustable blanking setting to the implantable monitoring circuit; and

wherein the implantable monitoring circuit is configured to store the received adjustable blanking setting in the memory circuit.

34. (New) The system of claim 25, wherein the duration corresponding to the adjustable blanking setting comprises a preset refractory period including a adjustable blanking interval and a noise window.

35. (New) The system of claim 34, wherein the noise window is derived from a difference between the preset refractory period and the adjustable blanking interval.

36. (New) The system of claim 25, further comprising:

a first lead coupled to the first sensing input and configured to sense the ventricular electrical signal;

a second lead coupled to the second sensing input and configured to sense the atrial electrical signal; and

wherein the implantable therapy circuit is coupled to at least one of the first or second leads.

37. (New) A memory circuit within an implantable device, the memory comprising instructions for operating the implantable device, the instructions when performed by a processor within the implantable device causing the implantable device to:

store an adjustable blanking setting;

receive information indicative of a ventricular electrical signal corresponding to a ventricular event;

receive information indicative of an atrial electrical signal corresponding to an atrial event;

therapeutically deliver electrical energy to a heart using the information indicative of at least one of the ventricular electrical signal or the atrial electrical signal; and

ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration corresponding to the adjustable blanking setting, at least one of (1) the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event, or (2) the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

38. (New) The memory circuit of claim 37, wherein the instructions causing the implantable device to store the adjustable blanking setting include causing the implantable device to store a adjustable blanking interval; and

wherein the instructions causing the implantable device to disregard the atrial or the ventricular electrical signal include causing the implantable device to ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the adjustable blanking interval, the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

39. (New) The memory circuit of claim 38, wherein the instructions causing the implantable device to disregard the atrial electrical signal include causing the implantable device to discard information indicative of the atrial electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

40. (New) The memory circuit of claim 38, wherein the instructions causing the implantable device to disregard the atrial electrical signal include causing the implantable device to disable a sensing input from receiving information indicative of the atrial electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

41. (New) The memory circuit of claim 37, wherein the instructions causing the implantable device to store the adjustable blanking setting include causing the implantable device to store a adjustable blanking interval; and

wherein the instructions causing the implantable device to disregard the atrial or the ventricular electrical signal include causing the implantable device to ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the adjustable blanking interval, the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

42. (New) The memory circuit of claim 41, wherein the instructions causing the implantable device to disregard the ventricular signals include causing the implantable device to discard information indicative of the ventricular electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

43. (New) The memory circuit of claim 41, wherein the instructions causing the implantable device to disregard the ventricular signals include causing the implantable device to disable a sensing input from receiving information indicative of the ventricular electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

44. (New) The memory circuit of claim 37, wherein the instructions causing the implantable device to store the adjustable blanking setting include causing the implantable device to store a first adjustable blanking interval and a second adjustable blanking interval; and

wherein the instructions causing the implantable device to disregard the atrial or ventricular signals include causing the medical device to:

ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the first adjustable blanking interval, the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event; and

ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the second adjustable blanking interval, the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

45. (New) The memory circuit of claim 37, comprising instructions causing the implantable device to receive the adjustable blanking setting from an external interface device; and

wherein the external interface device is configured to receive the adjustable blanking setting from a user and configured to transmit the adjustable blanking setting to the implantable device.

46. (New) The memory circuit of claim 37, wherein the duration corresponding to the adjustable blanking setting comprises a preset refractory period including a adjustable blanking interval and a noise window.

47. (New) The memory circuit of claim 46, wherein the noise window is derived from a difference between a preset refractory period and the adjustable blanking interval.